AMENDMENTS TO THE CLAIMS

Please cancel Claims 12-14, 40-42, and 68-70.

Please amend Claims 1, 3, 6, 7, 15, 16, 29, 31, 35, 43, 44, 57, 59, 62, 63, 71, 72, 85, 92-96, 98, 99, 106-110, 112, 113, 120-124, and 126 as follows:

1. (Currently Amended) A process for scheduling the recording, storing, and deleting of television and/or Web page program material on a storage medium in a computer environment, comprising the steps of:

accepting as input a prioritized list of program viewing preferences;

wherein said list contains a viewer's explicit preferred program selections for recording and inferred preferred program selections for recording;

comparing said list with a database of program guide objects;

generating a schedule of time versus available storage space that is optimal for the viewer's explicit or inferred preferred programs;

wherein said preferred programs include television broadcast programs and/or Universal Resource Locators (URLs); and

wherein said program guide objects indicate when programs of interest are broadcast[[.]];

generating an ordered list of future showings of a specific program of interest using said database of program guide objects;

wherein each showing of said specific program of interest in said ordered list is checked for input source or storage space conflicts with programs previously scheduled for recording; and

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wherein if a particular showing of said specific program of interest is found having no input and/or space conflicts, then said particular showing of said specific program of interest is scheduled for recording.

- 2. (Original) The process of claim 1, wherein the viewer may request that certain programs be captured, which results in the highest possible priority for those programs.
- 3. (Currently Amended) The process of claim 1, wherein the viewer may explicitly express preferences using appurtenances provided through the a viewer interface.
- 4. (Original) The process of claim 1, wherein said preferences may be inferred from viewing patterns.
- 5. (Original) The process of claim 1, wherein said preferences correspond to television viewing objects stored in a replicated database.
- (Currently Amended) The process of claim 1, further comprising the steps of:
 providing creating a space schedule;
 providing creating an input schedule;

wherein said space schedule tracks all currently recorded programs and the programs that have been scheduled to be recorded in the future; and

wherein said input schedule tracks the free and occupied time slots for each input source.

7. (Currently Amended) The process of claim 6, wherein the amount of space available at any given moment in time may be found by generating the a sum of all occupied space or space that will be occupied at that particular time, and subtracting that the sum from the total capacity available to store programs.

8. (Previously Presented) The process of claim 1, wherein inferred programs previously scheduled for recording automatically lose conflict decisions with explicit program selections.

- 9. (Original) The process of claim 1, wherein a program is recorded if at all times between when the recording would be initiated and when it expires, sufficient space is available to hold it.
- 10. (Original) The process of claim 6, wherein there must be an input available from which to record for the duration of the program.
- 11. (Original) The process of claim 6, wherein only those inputs from which the desired program can be recorded are considered during scheduling.
- 12-14. (Canceled)
- 15. (Currently Amended) The process of claim 12 1, further comprising the step of: sorting said list of showings; and

wherein the ordering of said list results in the viewer being presented with any conflicting programs in order from least impact on scheduled programs to greatest.

- 16. (Currently Amended) The process of claim 15, wherein for each candidate showing in said list, the viewer is presented with the <u>an</u> option of shortening the expiration dates on conflicting programs.
- 17. (Original) The process of claim 15, wherein the viewer is presented with the option to cancel each previously scheduled recording that has an input conflict with the desired program.
- 18. (Original) The process of claim 1, further comprising the step of: providing a background scheduler.

19. (Original) The process of claim 18, wherein said background scheduler schedules each preferred program in turn until the list of preferred programs is exhausted or no further opportunity to record is available.

- 20. (Original) The process of claim 18, wherein a preferred program is scheduled if and only if there are no conflicts with other scheduled programs□
- 21. (Original) The process of claim 18, wherein a preferred program which has been scheduled may be deleted if it conflicts with an explicit selection or if a change in viewer preferences identifies a higher priority program that could be recorded at that time.
- 22. (Original) The process of claim 1, wherein all conflicts are resolved as early as possible.
- 23. (Original) The process of claim 1, wherein any schedule conflicts are determined immediately when the viewer makes an explicit selection of a program to record.
- 24. (Previously Presented) The process of claim 1, wherein if there are schedule conflicts with other programs that the viewer has explicitly selected, the viewer is a sked which scheduled recordings should be canceled and which should be completed.
- 25. (Original) The process of claim 4, wherein schedule conflicts between explicit program selections and inferred "fuzzy" program selections are resolved in favor of said explicit selections without asking the viewer.
- 26. (Original) The process of claim 1, wherein the expiration time of any conflicting stored programs is shortened to exactly that needed to allow recording of a desired program.
- 27. (Original) The process of claim 1, wherein schedule conflicts resulting from the recording of aggregate objects are resolved using the preference weighting of the programs involved.

28. (Original) The process of claim 1, wherein if multiple conflicts are caused by a particular program in an aggregate object, it will only be recorded if its preference exceeds that of all conflicting programs.

29. (Currently Amended) An apparatus for scheduling the recording, storing, and deleting of television and/or Web page program material on a storage medium in a computer environment, comprising:

a module for accepting as input a prioritized list of program viewing preferences;

wherein said list contains a viewer's explicit preferred program selections for recording and derived preferred program selections for recording;

a module for comparing said list with a database of program guide objects;

a module for generating a schedule of time versus available storage space that is optimal for the viewer's explicit or inferred preferred programs;

wherein said preferred programs include television broadcast programs and <u>/or</u> Universal Resource Locators (URLs); and

wherein said program guide objects indicate when programs of interest are broadcast[[.]];

a module for generating an ordered list of future showings of a specific program of interest using said database of program guide objects;

wherein each showing of said specific program of interest in said ordered list is checked for input source or storage space conflicts with programs previously scheduled for recording; and

wherein if a particular showing of said specific program of interest is found having no input and/or space conflicts, then said particular showing of said specific program of interest is scheduled for recording.

30. (Original) The apparatus of claim 29, wherein the viewer may request that certain programs be captured, which results in the highest possible priority for those programs.

- 31. (Currently Amended) The apparatus of claim 29, wherein the viewer may explicitly express preferences using appurtenances provided through the a viewer interface.
- 32. (Original) The apparatus of claim 29, wherein said preferences may be inferred from viewing patterns.
- 33. (Original) The apparatus of claim 29, wherein said preferences correspond to television viewing objects stored in a replicated database.
- 34. (Original) The apparatus of claim 29, further comprising:

a space schedule;

an input schedule;

wherein said space schedule tracks all currently recorded programs and the programs that have been scheduled to be recorded in the future; and

wherein said input schedule tracks the free and occupied time slots for each input source.

- 35. (Currently Amended) The apparatus of claim 34, wherein the amount of space available at any given moment in time may be found by generating the a sum of all occupied space or space that will be occupied at that particular time, and subtracting that the sum from the total capacity available to store programs.
- 36. (Previously Presented) The apparatus of claim 29, wherein inferred programs previously scheduled for recording automatically lose conflict decisions with explicit program selections.

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37. (Original) The apparatus of claim 29, wherein a program is recorded if at all times between when the recording would be initiated and when it expires, sufficient space is available to hold it.

- 38. (Original) The apparatus of claim 34, wherein there must be an input available from which to record for the duration of the program.
- 39. (Original) The apparatus of claim 34, wherein only those inputs from which the desired program can be recorded are considered during scheduling.

40-42. (Canceled)

43. (Currently Amended) The apparatus of claim 40 29, further comprising: sorting said list of showings; and

wherein the ordering of said list results in the viewer being presented with any conflicting programs in order from least impact on scheduled programs to greatest.

- 44. (Currently Amended) The apparatus of claim 43, wherein for each candidate showing in said list, the viewer is presented with the an option of shortening the expiration dates on conflicting programs.
- 45. (Original) The apparatus of claim 43, wherein the viewer is presented with the option to cancel each previously scheduled recording that has an input conflict with the desired program.
- 46. (Original) The apparatus of claim 29, further comprising: a background scheduler.
- 47. (Original) The apparatus of claim 46, wherein said background scheduler schedules each preferred program in turn until the list of preferred programs is exhausted or no further opportunity to record is available.

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48. (Original) The apparatus of claim 46, wherein a preferred program is scheduled if and only if there are no conflicts with other scheduled programs.

- 49. (Original) The apparatus of claim 46, wherein a preferred program which has been scheduled may be deleted if it conflicts with an explicit selection or if a change in viewer preferences identifies a higher priority program that could be recorded at that time.
- 50. (Original) The apparatus of claim 29, wherein all conflicts are resolved as early as possible.
- 51. (Original) The apparatus of claim 29, wherein any schedule conflicts are determined immediately when the viewer makes an explicit selection of a program to record.
- 52. (Previously Presented) The apparatus of claim 29, wherein if there are schedule conflicts with other programs that the viewer has explicitly selected, the viewer is a sked which scheduled recordings should be canceled and which should be completed.
- 53. (Original) The apparatus of claim 32, wherein schedule conflicts between explicit program selections and inferred "fuzzy" program selections are resolved in favor of said explicit selections without asking the viewer.
- 54. (Original) The apparatus of claim 29, wherein the expiration time of any conflicting stored programs is shortened to exactly that needed to allow recording of a desired program.
- 55. (Original) The apparatus of claim 29, wherein schedule conflicts resulting from the recording of aggregate objects are resolved using the preference weighting of the programs involved.
- 56. (Original) The apparatus of claim 29, wherein if multiple conflicts are caused by a particular program in an aggregate object, it will only be recorded if its preference exceeds that of all conflicting programs.

57. (Currently Amended) A program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform method steps for scheduling the recording, storing, and deleting of television and or Web page program material on a storage medium in a computer environment, comprising the steps of:

accepting as input a prioritized list of program viewing preferences;

wherein said list contains a viewer's explicit preferred program selections for recording and derived preferred program selections for recording;

comparing said list with a database of program guide objects;

generating a schedule of time versus available storage space that is optimal for the viewer's explicit or inferred preferred programs;

wherein said preferred programs include television broadcast programs and <u>/or</u> Universal Resource Locators (URLs); and

wherein said program guide objects indicate when programs of interest are broadcast[[.]];

generating an ordered list of future showings of a specific program of interest using said database of program guide objects;

wherein each showing of said specific program of interest in said ordered list is checked for input source or storage space conflicts with programs previously scheduled for recording; and

wherein if a particular showing of said specific program of interest is found having no input and/or space conflicts, then said particular showing of said specific program of interest is scheduled for recording.

58. (Original) The method of claim 57, wherein the viewer may request that certain programs be captured, which results in the highest possible priority for those programs.

59. (Currently Amended) The method of claim 57, wherein the viewer may explicitly express preferences using appurtenances provided through the <u>a</u> viewer interface.

- 60. (Original) The method of claim 57, wherein said preferences may be inferred from viewing patterns.
- 61. (Original) The method of claim 57, wherein said preferences correspond to television viewing objects stored in a replicated database.
- 62. (Currently Amended) The method of claim 57, further comprising the steps of:

 providing creating a space schedule;

 providing creating an input schedule;

wherein said space schedule tracks all currently recorded programs and the programs that have been scheduled to be recorded in the future; and

wherein said input schedule tracks the free and occupied time slots for each input source.

- 63. (Currently Amended) The method of claim 62, wherein the amount of space available at any given moment in time may be found by generating the a sum of all occupied space or space that will be occupied at that particular time, and subtracting that the sum from the total capacity available to store programs.
- 64. (Previously Presented) The method of claim 57, wherein inferred programs previously scheduled for recording automatically lose all conflict decisions with explicit program selections.
- 65. (Original) The method of claim 57, wherein a program is recorded if at all times between when the recording would be initiated and when it expires, sufficient space is available to hold it.

66. (Original) The method of claim 62, wherein there must be an input available from which to record for the duration of the program.

67. (Original) The method of claim 62, wherein only those inputs from which the desired program can be recorded are considered during scheduling.

68-70. (Canceled)

71. (Currently Amended) The method of claim 68 57, further comprising the step of: sorting said list of showings; and

wherein the ordering of said list results in the viewer being presented with any conflicting programs in order from least impact on scheduled programs to greatest.

- 72. (Currently Amended) The method of claim 71, wherein for each candidate showing in said list, the viewer is presented with the <u>an</u> option of shortening the expiration dates on conflicting programs.
- 73. (Original) The method of claim 71, wherein the viewer is presented with the option to cancel each previously scheduled recording that has an input conflict with the desired program.
- 74. (Original) The method of claim 57, further comprising the step of: providing a background scheduler.
- 75. (Original) The method of claim 74, wherein said background scheduler schedules each preferred program in turn until the list of preferred programs is exhausted or no further opportunity to record is available.
- 76. (Original) The method of claim 74, wherein a preferred program is scheduled if and only if there are no conflicts with other scheduled programs.

77. (Original) The method of claim 74, wherein a preferred program which has been scheduled may be deleted if it conflicts with an explicit selection or if a change in viewer preferences identifies a higher priority program that could be recorded at that time.

- 78. (Original) The method of claim 57, wherein all conflicts are resolved as early as possible.
- 79. (Original) The method of claim 57, wherein any schedule conflicts are determined immediately when the viewer makes an explicit selection of a program to record.
- 80. (Previously Presented) The method of claim 57, wherein if there are schedule conflicts with other programs that the viewer has explicitly selected, the viewer is a sked which scheduled recordings should be canceled and which should be completed.
- 81. (Original) The method of claim 60, wherein schedule conflicts between explicit program selections and inferred "fuzzy" program selections are resolved in favor of said explicit selections without asking the viewer.
- 82. (Original) The method of claim 57, wherein the expiration time of any conflicting stored programs is shortened to exactly that needed to allow recording of a desired program.
- 83. (Original) The method of claim 57, wherein schedule conflicts resulting from the recording of aggregate objects are resolved using the preference weighting of the programs involved.
- 84. (Original) The method of claim 57, wherein if multiple conflicts are caused by a particular program in an aggregate object, it will only be recorded if its preference exceeds that of all conflicting programs.
- 85. (Currently Amended) A process for scheduling the recording, storing, and deleting of television and/or Web page program material on a storage medium, comprising:

creating a prioritized list of programs to be recorded;

wherein said list contains a viewer's explicit program selections for recording and inferred program selections for recording;

comparing said list with a database of program guide objects;

deriving an ordered list of future showings of a specific program of interest from a database of program guide objects;

wherein said program guide objects indicate when programs are broadcast or transmitted;

determining storage medium memory space and input <u>source</u> scheduling conflicts between <u>programs</u> showings of said specific program of interest in said <u>ordered</u> list and programs that have been scheduled to be recorded in the future;

wherein said programs that have been scheduled to be recorded in the future comprise a viewer's explicit program selections and inferred program selections; and

wherein if a particular showing of said specific program of interest is found with no memory space and/or input conflicts, then the particular showing is scheduled for recording.

wherein said determining step generates a schedule of time versus available storage medium memory space that is optimal for the viewer's explicit or and inferred programs; and

scheduling programs in said list to be recorded that do not have storage medium memory space and input conflicts with other scheduled programs.

- 86. (Previously Presented) The process of claim 85, wherein the viewer may explicitly request that certain programs be captured, which results in the highest possible priority for those programs.
- 87. (Previously Presented) The process of claim 85, wherein said inferred program selections may be inferred from the viewer's viewing patterns.

88. (Previously Presented) The process of claim 85, wherein said inferred program selections are inferred from the viewer's indicated preferences.

- 89. (Previously Presented) The process of claim 85, wherein inferred programs already scheduled for recording automatically lose conflict decisions with explicit program selections.
- 90. (Previously Presented) The process of claim 85, wherein a program is recorded if at all times between when the recording would be initiated and when it expires, sufficient storage medium space is available to hold it.
- 91. (Previously Presented) The process of claim 85, wherein there must be an input available from which to record for the duration of the program.
- 92. (Currently Amended) The process of claim 85, wherein only those inputs from which the <u>a</u> desired program can be recorded are considered during scheduling.
- 93. (Currently Amended) The process of claim 85, further comprising:

 deriving a list of showings of a program of interest from said program guide;

 wherein said determining step checks the list of showings for an inferred program

 selection in an attempt to find a showing of said inferred program that does not have any

wherein if a showing is found with no conflicts, then the inferred program is scheduled for recording for said showing wherein said specific program of interest is an inferred program selection.

94. (Currently Amended) The process of claim 85, further comprising:

deriving a list of showings of a program of interest from said program guide;

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conflicts; and

wherein said determining step checks the list of showings for an explicit program selection in an attempt to find a showing of said explicit program that does not have any conflicts; and

wherein if a showing is found with no conflicts, then the explicit program is scheduled for recording for said showing wherein said specific program of interest is an explicit program selection.

- 95. (Currently Amended) The process of claim 85 94, wherein the viewer is presented with an option to cancel each previously scheduled recording that has an input conflict with one of the viewer's explicit program selection[[s]].
- 96. (Currently Amended) The process of claim 85 <u>94</u>, wherein the viewer is presented with an option to shorten each previously recorded program's expiration date that has a storage medium memory space conflict with one of the viewer's explicit program selection[[s]].
- 97. (Previously Presented) The process of claim 96, wherein the viewer's explicit program selection is scheduled to be recorded if the viewer shortens each of the previously recorded program's expiration dates that have a storage medium memory space conflict with the viewer's explicit program selection.
- 98. (Currently Amended) The process of claim 85 94, wherein if any previously scheduled programs conflict with an explicit program selection, then the viewer is a sked which previously scheduled program should be canceled and which should be completed.
- 99. (Currently Amended) An apparatus for scheduling the recording, storing, and deleting of television and <u>or</u> Web page program material on a storage medium, comprising:

a module for creating a prioritized list of programs to be recorded;

wherein said list contains a viewer's explicit program selections for recording and inferred program selections for recording;

a module for comparing said list with a database of program guide objects;

a module for deriving an ordered list of future showings of a specific program of interest from a database of program guide objects;

wherein said program guide objects indicate when programs are broadcast or transmitted;

a module for determining storage medium memory space and input source scheduling conflicts between programs showings of said specific program of interest in said ordered list and programs that have been scheduled to be recorded in the future;

wherein said programs that have been scheduled to be recorded in the future comprise a viewer's explicit program selections and inferred program selections; and

wherein if a particular showing of said specific program of interest is found with no memory space and/or input conflicts, then the particular showing is scheduled for recording.

wherein said determining module generates a schedule of time versus available storage medium memory space that is optimal for the viewer's explicit or inferred programs; and

a module for scheduling programs in said list to be recorded that do not have storage medium memory space and input conflicts with other scheduled programs.

- 100. (Previously Presented) The apparatus of claim 99, wherein the viewer may explicitly request that certain programs be captured, which results in the highest possible priority for those programs.
- 101. (Previously Presented) The apparatus of claim 99, wherein said inferred program selections may be inferred from the viewer's viewing patterns.

102. (Previously Presented) The apparatus of claim 99, wherein said inferred program selections are inferred from the viewer's indicated preferences.

- 103. (Previously Presented) The apparatus of claim 99, wherein inferred programs already scheduled for recording automatically lose conflict decisions with explicit program selections.
- 104. (Previously Presented) The apparatus of claim 99, wherein a program is recorded if at all times between when the recording would be initiated and when it expires, sufficient storage medium space is available to hold it.
- 105. (Previously Presented) The apparatus of claim 99, wherein there must be an input available from which to record for the duration of the program.
- 106. (Currently Amended) The apparatus of claim 99, wherein only those inputs from which the <u>a</u> desired program can be recorded are considered during scheduling.
- 107. (Currently Amended) The apparatus of claim 99, further comprising:

 a module for deriving a list of showings of a program of interest from said program guide;

wherein said determining module checks the list of showings for an inferred program selection in an attempt to find a showing of said inferred program that does not have any conflicts; and

wherein if a showing is found with no conflicts, then the inferred program is scheduled for recording for said showing wherein said specific program of interest is an inferred program selection.

108. (Currently Amended) The apparatus of claim 99, further comprising:

a module for deriving a list of showings of a program of interest from said program
guide;

wherein said determining module checks the list of showings for an explicit program selection in an attempt to find a showing of said explicit program that does not have any

conflicts; and

wherein if a showing is found with no conflicts, then the explicit program is

scheduled for recording for said showing wherein said specific program of interest is an

explicit program selection.

109. (Currently Amended) The apparatus of claim 99108, wherein the viewer is presented

with an option to cancel each previously scheduled recording that has an input conflict with

one of the viewer's explicit program selections.

110. (Currently Amended) The apparatus of claim 99108, wherein the viewer is presented

with an option to shorten each previously recorded program's expiration date that has a

storage medium memory space conflict with one of the viewer's explicit program selections.

111. (Previously Presented) The apparatus of claim 110, wherein the viewer's explicit

program selection is scheduled to be recorded if the viewer shortens each of the previously

recorded program's expiration dates that have a storage medium memory space conflict with

the viewer's explicit program selection.

112. (Currently Amended) The apparatus of claim 99108, wherein if any previously

scheduled programs conflict with an explicit program selection, then the viewer is a sked

which previously scheduled program should be canceled and which should be completed.

13. (Currently Amended) A program storage medium readable by a computer, tangibly

embodying a program of instructions executable by the computer to perform method steps

for scheduling the recording, storing, and deleting of television and/or Web page program

material on a storage medium, comprising:

creating a prioritized list of programs to be recorded;

wherein said list contains a viewer's explicit program selections for recording and inferred program selections for recording;

comparing said list with a database of program guide objects;

deriving an ordered list of future showings of a specific program of interest from a database of program guide objects;

wherein said program guide objects indicate when programs are broadcast or transmitted;

determining storage medium memory space and input <u>source</u> scheduling conflicts between <u>programs</u> showings of said specific <u>program of interest</u> in said <u>ordered</u> list and programs that have been scheduled to be recorded in the future;

wherein said programs that have been scheduled to be recorded in the future comprise a viewer's explicit program selections and inferred program selections; and

wherein if a particular showing of said specific program of interest is found with no memory space and/or input conflicts, then the particular showing is scheduled for recording.

wherein said determining step generates a schedule of time versus available storage medium memory space that is optimal for the viewer's explicit or inferred programs; and

scheduling programs in said-list to be recorded that do not have storage medium memory space and input conflicts with other scheduled programs.

- 114. (Previously Presented) The method of claim 113, wherein the viewer may explicitly request that certain programs be captured, which results in the highest possible priority for those programs.
- 115. (Previously Presented) The method of claim 113, wherein said inferred program selections may be inferred from the viewer's viewing patterns.

116. (Previously Presented) The method of claim 113, wherein said inferred program selections are inferred from the viewer's indicated preferences.

- 117. (Previously Presented) The method of claim 113, wherein inferred programs already scheduled for recording automatically lose conflict decisions with explicit program selections.
- 118. (Previously Presented) The method of claim 113, wherein a program is recorded if at all times between when the recording would be initiated and when it expires, sufficient storage medium space is available to hold it.
- 119. (Previously Presented) The method of claim 113, wherein there must be an input available from which to record for the duration of the program.
- 120. (Currently Amended) The method of claim 113, wherein only those inputs from which the <u>a</u> desired program can be recorded are considered during scheduling.

(Currently Amended) The method of claim 113, further comprising:

deriving a list of showings of a program of interest from said program guide;

wherein said determining step checks the list of showings for an inferred program
selection in an attempt to find a showing of said inferred program that does not have any
conflicts; and

wherein if a showing is found with no conflicts, then the inferred program is scheduled for recording for said showing wherein said specific program of interest is an inferred program selection.

122. (Currently Amended) The method of claim 113, further comprising:
deriving a list of showings of a program of interest from said program guide;

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wherein said determining step checks the list of showings for an explicit program selection in an attempt to find a showing of said explicit program that does not have any conflicts; and

wherein if a showing is found with no conflicts, then the explicit program is scheduled for recording for said showing wherein said specific program of interest is an explicit program selection.

- 123. (Currently Amended) The method of claim 113 122, wherein the viewer is presented with an option to cancel each previously scheduled recording that has an input conflict with one of the viewer's explicit program selections.
- 124. (Currently Amended) The method of claim 113 122, wherein the viewer is presented with an option to shorten each previously recorded program's expiration date that has a storage medium memory space conflict with one of the viewer's explicit program selections.
- 125. (Previously Presented) The method of claim 124, wherein the viewer's explicit program selection is scheduled to be recorded if the viewer shortens each of the previously recorded program's expiration dates that have a storage medium memory space conflict with the viewer's explicit program selection.
- 126. (Currently Amended) The method of claim 113 122, wherein if any previously scheduled programs conflict with an explicit program selection, then the viewer is a sked which previously scheduled program should be canceled and which should be completed.